



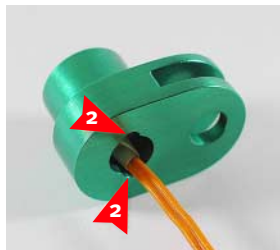
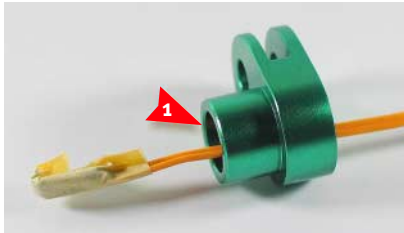
## PREPPING THE IGNITER

We will use an electric match style igniter, such as DaveyFire or BlackSky HiRMI. Form a spoon shape with masking tape around the head of the igniter as shown. Add one-eighth to one-quarter of a gram of FFFF black powder or Pyrodex pyrogen. Fold the tape around the end. This will insure the pyrogen will stay in contact with the igniter and will ease assembly.



## INSTALLING THE IGNITER

Insert the igniter through the igniter seal hole with the pyrogen end in the combustion chamber of the cup (1).



Position the igniter leads to one side setting into an igniter lead pathway (2).

Insert the neoprene igniter seal.



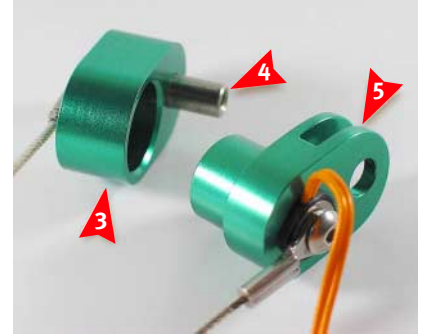
The cup screw now goes through the eye of the retention cable, through a washer, and threads into the seal, and tighten.

Tuck the remaining portion of the pyrogen end of the igniter into the cup.



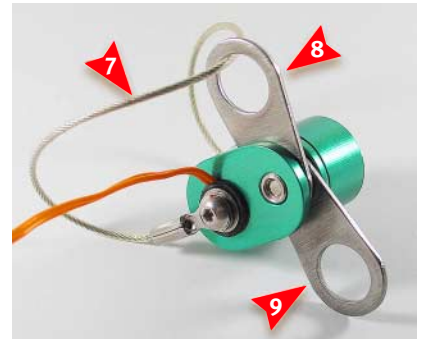
## COMPLETING THE ASSEMBLY

Place the lid (3) onto the cup with the retention bolt (4) lined up with the appropriate holes in the retention fork (5).



Note that the bolt passes through the holes in the fork. Between the two sides (6) of the fork is where we will install our retention tabs.

Pass the retention cable (7) through one of the large holes on one of the tabs. That tab (8) will be attached to a permanent anchor point and will keep the triggered parts from being lost, the other tab (9) will then be attached to the item to be temporarily tethered.



Hold both tabs together with the small holes aligned, insert the small end of the tabs into the fork and align the small holes in the tab with the holes in the fork. Push the lid on the remainder of the way.

The retention bolt will pass through the small holes and come through and rest flush with the outside surface of the cup. The bolt is now holding the tabs in place.

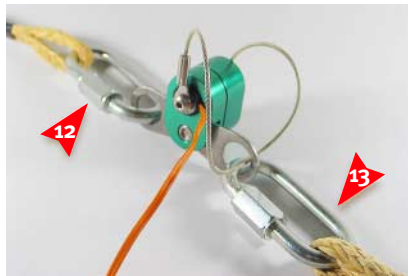


## ATTACHING TO TETHER

Now Tether is ready to retain. The right side in the photo above would be the anchored side (10). The left side tab is the released side (11).



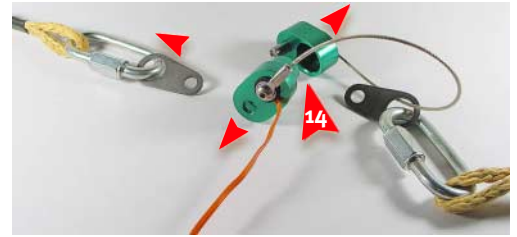
Same angle as above photo with a slightly wider view.



Another view showing Tether in a retaining posture. For example, the released side (12) might retain a pilot chute from extracting the main chute. The anchored side (13) might attach to a structural load-bearing part of the airframe such as a bulkhead.

## TRIGGERING TETHER TO RELEASE

When the charge in the cup is ignited, the rapid expansion of gases within the combustion chamber (14) forces the lid off quickly.



The lid (15) pulls the bolt with it. The bolt sliding out releases both tabs (16).

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